

ABB BALDOR RELIANCE III

Customer information packet

EM4413T-4

150HP, 3570RPM, 3PH, 60HZ, 445TS, A4478M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	445TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	164.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	164.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 2 AWG
Motor Standards	NEMA
Motor Type	A4478M

Part Detail

Revision	S
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3535
Layout	617435-049
Eff. date	02-16-2026
CD Diagram	416820-036
Poles	02
Leads	3#2 (02 per group)
Proprietary	False
Created date	08-13-2012

Mounting Arrangement	F1
Number of Poles	2
Overall Length	41.08 IN
Power Factor	90
Product Family	Other
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3570 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2349L														
SPEC NO.	P44G3906			CAT.NO.		EM4413T-4					FRAME	445TS		
HP	150	VOLTS		460	PHASE		3	DESIGN		B	TYPE		P	
RPM	3570	AMPS		164	HZ		60	AMB		40	SF		1.15	
DRIVE END BEARING	65BC03J30X			DUTY		CONT	INSUL.CLASS			F				
OPP D.E. BEARING	65BC03J30X			ENCL		TEFC	CODE		G					
SER.NO.				POWER FACTOR			90	NEMA-NOM-EFFICIENCY					95	
							MAX CORR KVAR			20.0	GUARANTEED EFFICIENCY			94.1
							NEMA NOM/CSA QUOTED EFF							
							MOTOR WEIGHT							

Accessories

Part number	Description	Multiplier
089490104B	BRKT,DE 089490103WCA, C-Face	P1
089490108A	D-FLANGE EP MACHINING, G28 W/6313 BRG	P1

ABB BALDOR RELIANCE III S/O		CUSTOMER INFORMATION PACKET					EM4413T-4 - 150HP, 3570RPM, 3PH, 60HZ, 445TS, A4478M, TEFC				
		FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS				
		445	150	P	3/60	3570	460				
AMPS		DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE				
164		CONT	40/F	1.15	B	G	TEFC				
E/S		ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)						
0		0	---	---	.0292						
PERFORMANCE											
LOAD		HP	AMPERES	RPM	% POWER FACTOR		% EFFICIENCY				
NO LOAD		0	34.7	3600	6.89		0				
1/4		37.5	59.2	3593	63.9		92.9				
2/4		75.1	90.3	3585	81.7		95.3				
3/4		113	125	3578	87.8		95.7				
4/4		150	164	3570	89.9		95.6				
5/4		187	204	3562	90.4		95.2				
SPEED TORQUE											
			RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.		AMPERES				
LOCKED ROTOR			0	138	304		1081				
PULL UP			1350	110	242		997				
BREAKDOWN			3461	280	618		552				
FULL LOAD			3570	100	221		164				
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.											
CALCULATED DATA NEMA NOMINAL EFFICIENCY = 95.0 PCT.											
			DRAWN BY: <u>CD</u> CHECKED BY: <u>CD</u> APPROVED BY: <u>R. MCELVEEN</u> DATE: <u>1/18/11</u>		AC MOTOR PERFORMANCE DATA		A44WG3535-R001 DATE ISSUED 03/04/20				

FRAME 445

RPM 3570

S.F. 1.15

ROTOR 0

HP 150

VOLTS 460

NEMA DESIGN B

TEST S.O. CALCULATED DATA

TYPE P

AMPS 164

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

ENCLOSURE TEFC

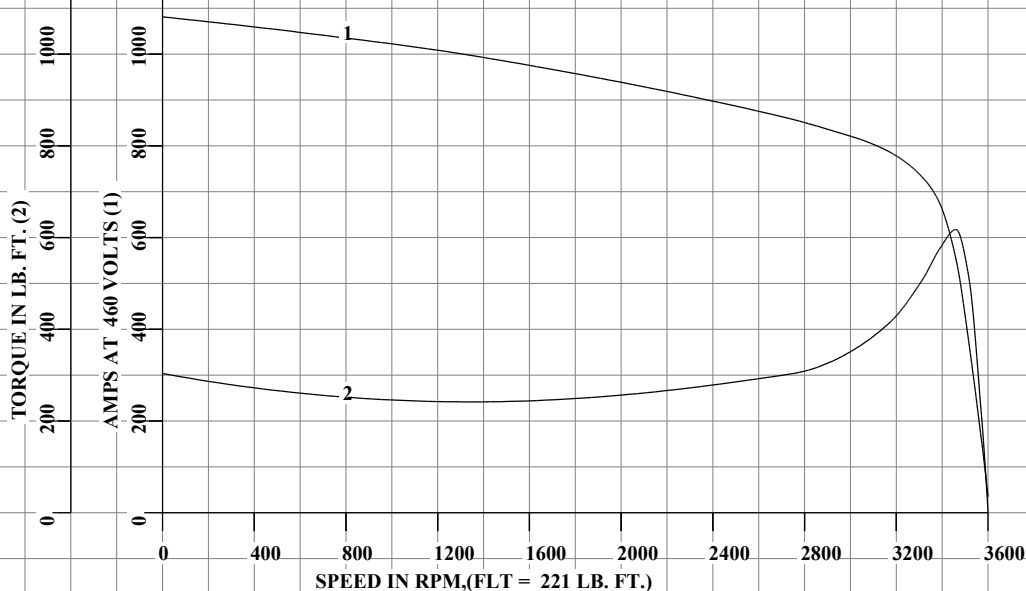
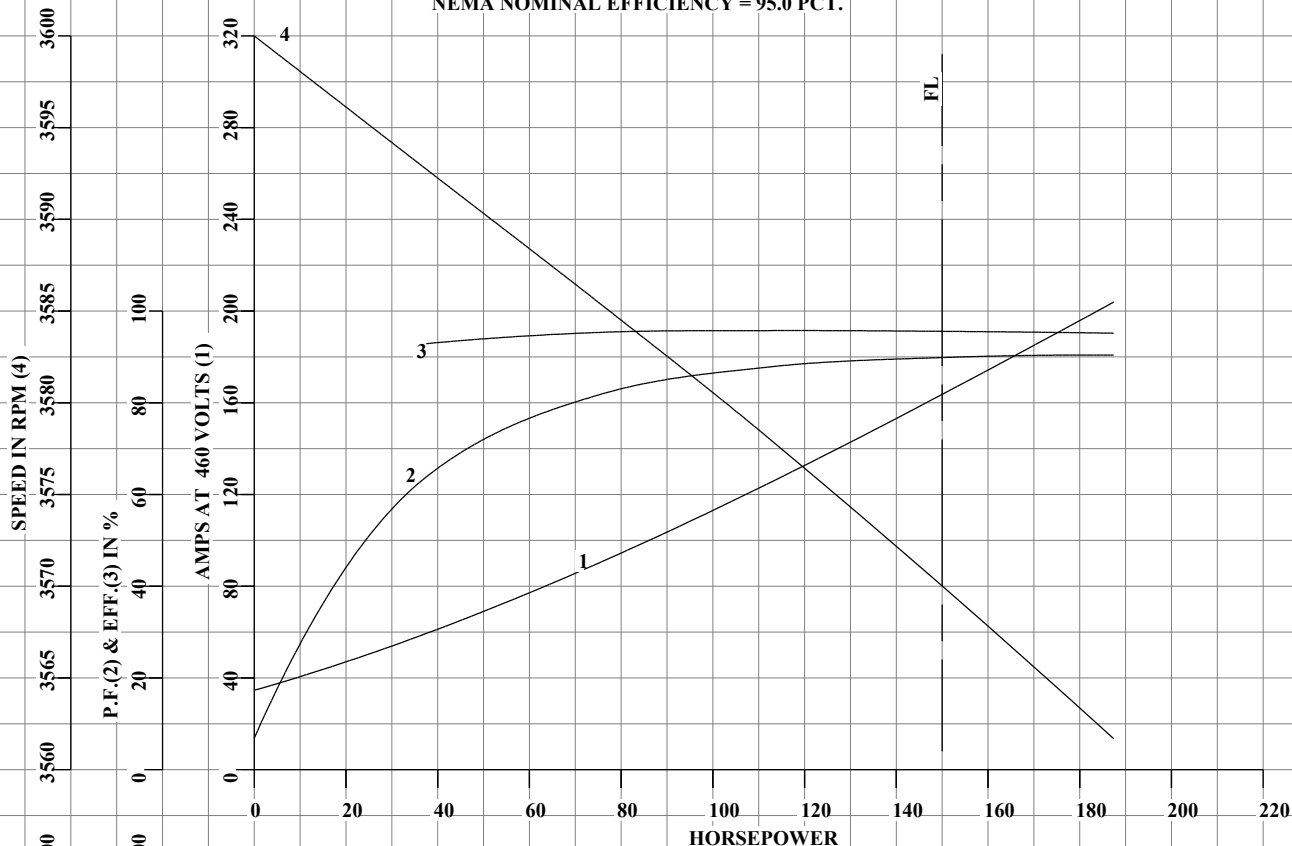
STATOR RES. @ 25°C .0292

AMB °C / INSUL 40/F

E/S 0

OHMS (BETWEEN LINES)

NEMA NOMINAL EFFICIENCY = 95.0 PCT.



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

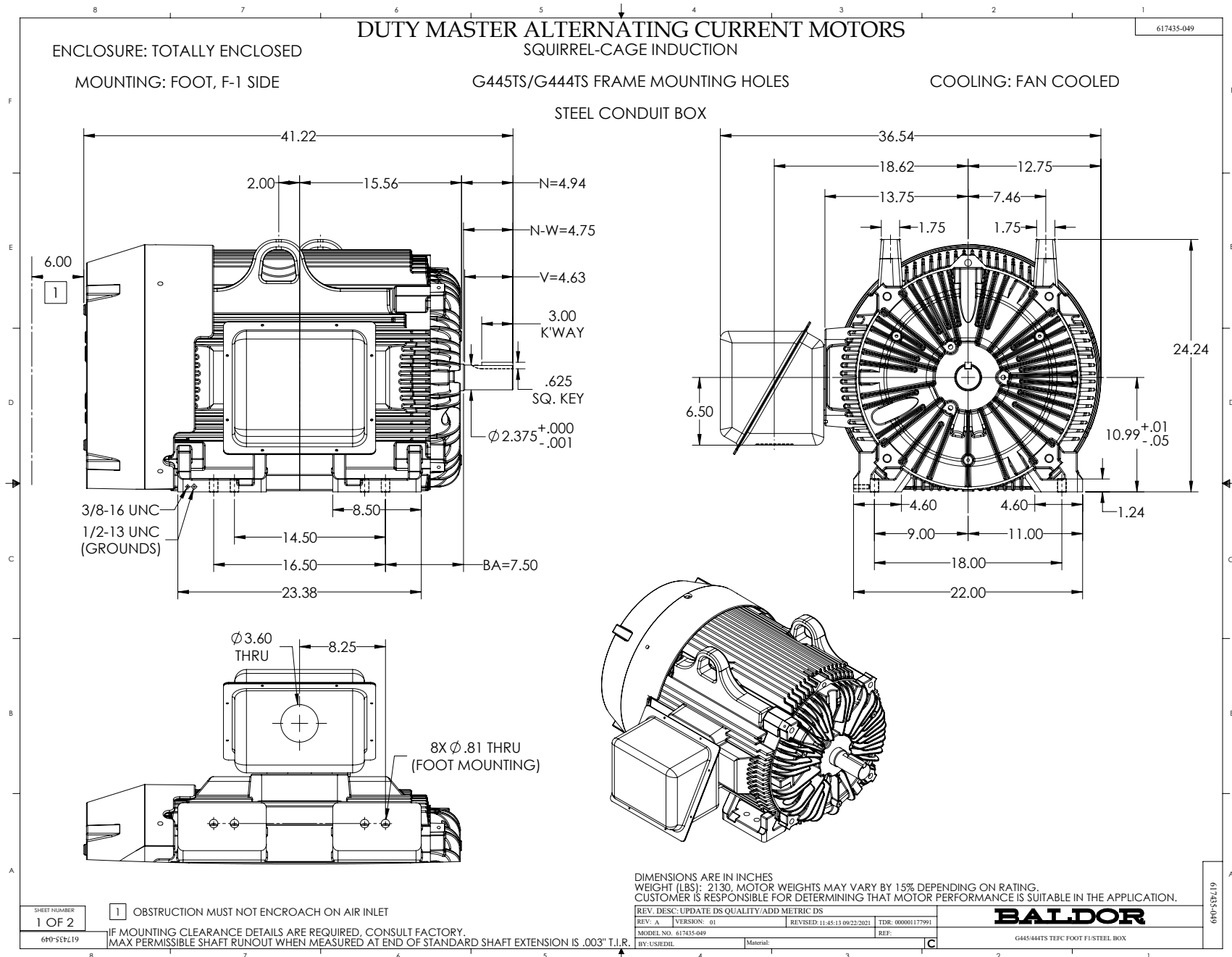


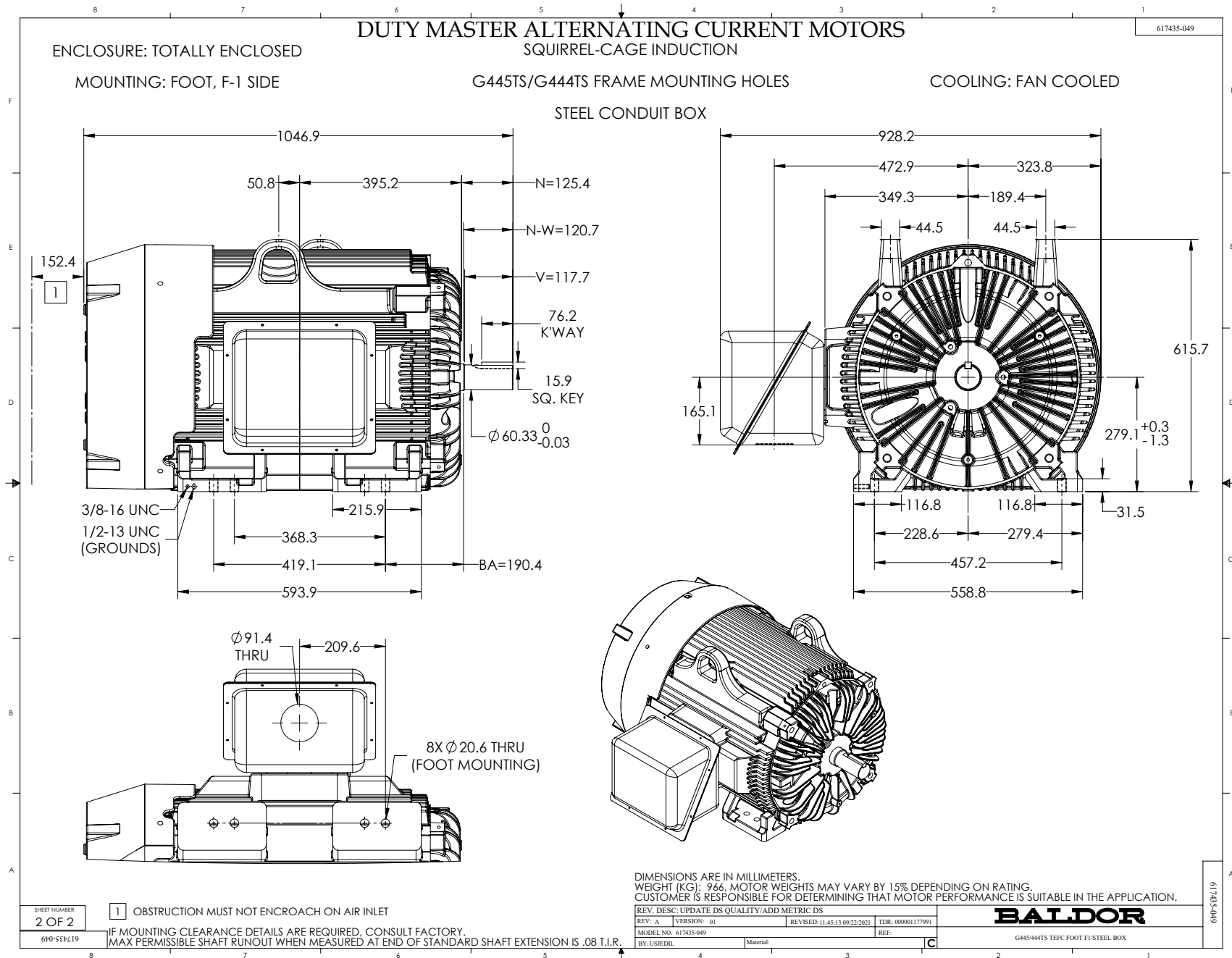
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APPROVED BY: R. MCELVEEN
DATE: 1/18/11

AC MOTOR
PERFORMANCE
DATA

A44WG3535-R001

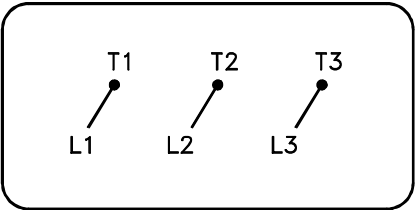
ISSUE DATE 03/04/2014





416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1